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ABSTRACT

Information on library networks that was included in a survey conducted by the Center for Education Statistics--the "Survey of Library Networks and Cooperative Library Organizations: 1985-1986"--indicates that there were 760 library networks at that time, with aggregate library membership estimated to be 76,280. Over three-fourths of the networks were based on written agreements signed by each member. Services provided to network members came from three different sources: the network headquarters, the members themselves (to each other), and external sources such as vendors or consultants. The network headquarters provided a variety of services, while the most important services provided by the members was interlibrary loan (53%), and by external sources or contractors, catalog production (29%). The number of paid library network staff members was 9,845, with the average number of staff per network at 13. Library networks received $656 million in 1985-86, or an average of $863,000 per network, and spent $490 million, or an average of $642,000 per network. Federal grants amounted to 9% of all funds received, with federal, state, and local funds representing 36% of funds received by networks. (EW)

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Characteristics of Library Networks, 1985-1986

In a time of tightened budgets, American libraries have been able to provide increased services and access to more materials through library networks.

This bulletin presents information on library networks that were included in the "Survey of Library Networks and Cooperative Library Organizations: 1985-1986," conducted for the Center for Education Statistics.

A library network is a cooperative organization. It refers to a formal arrangement among libraries to share materials, information and services among all members. A variety of libraries and organizations may participate. Organizations which qualified as library networks for the purpose of the survey were required to meet seven criteria, as follows:

1. The participants in the organization were primarily or exclusively libraries.
2. The organization and/or its participants engaged in cooperative activities which were beyond the scope of traditional interlibrary loan services as stated in the American Library Association Code.
3. The activities of the organization extended beyond reciprocal borrowing.
4. The organization operated for the mutual benefit of participating libraries.
5. The scope of the organization was interinstitutional (i.e., beyond branch libraries within an organization or libraries that are under a common funding source, such as school libraries in a municipality).

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6. The scope of network activities extended to resource sharing (e.g., interlibrary lending, equipment, staff with special skills, collection department, cooperative purchasing, etc.).

7. The operation of the network was based on a verbal or written agreement among its members.

A similar survey was conducted in 1977-78 1/ using only the first five criteria. A fuller description of the findings of the 1985-86 study and comparisons with the 1977-78 study will be provided in a formal statistical report. 2/

Number of Library Networks

- The number of library networks in 1985-86 was 760.
- Aggregate library membership in library networks was estimated to be 76,280.
- Most college or university and public libraries participated in at least one library network. The typical university library belonged to at least three networks.

Legal Structure

- Seventy-six percent of library networks were based on written agreements signed (or authorized) by each member. Twenty-two percent had a legislative mandate (i.e., were created or recognized by Federal, State or local statute). Fourteen percent were incorporated.

Provision and Use of Library Network Services

The services provided to network members came from three different sources: the network headquarters, the members themselves (to each other), and external sources such as vendors or consultants. The most common services provided by each of these three types of providers were as follows:

1/ U.S. Department of Education, National Center for Education Statistics, Statistics of Library Networks and Cooperative Organizations: 1977-78, (NCES 82-201).

2/ U.S. Department of Education, Center for Education Statistics, Statistics of Library Networks: 1985-86, (in preparation).

(1) Network Headquarters

- Training/workshops (provided by 74 percent of network headquarters)
- Continuing education (70 percent)
- Consultation to network members (67 percent)
- Professional collection (67 percent)
- Collection development (64 percent)
- Shared equipment and supplies (62 percent)
- Referral lists/directories (60 percent)

(2) Network Members

- Interlibrary loan (provided by 53 percent of network members)
- Unspecified professional development (32 percent)
- Training workshops (20 percent)
- Continuing education (19 percent)
- Collection development (18 percent)

(3) External Sources/Contractors

- Catalog production (recieved by 29 percent of networks)
- Physical processing (18 percent)
- Interlibrary loan (15 percent)
- Union list/catalog productions (14 percent)
- Electronic mail/teletype (14 percent)

The most common services used by network headquarters and/or by network members were as follows:

(1) Network Headquarters

- Training/workshops (used by 54 percent of network headquarters)
- Electronic mail/teletype (39 percent)
- Telefacsimile (29 percent)
- Interlibrary loan (20 percent)
- Referral lists/directories (18 percent)
- Continuing education (17 percent)
- Professional collection (17 percent)

(2) Network Members

- Consultation services (used by 71 percent of network members)
- Collection development (69 percent)
- Professional collection (68 percent)
- Interlibrary loan (64 percent)
- Shared equipment and supplies (62 percent)
- Referral lists/directories (62 percent)
- Access to online data bases (60 percent)

Staffing Patterns of Library Networks

The number of paid library network staff members (full-time equivalent or FTE) was 9,845. The average number of paid (FTE) staff per library network was 13.0

The number of computer-related professionals among network members was 1,025. There were 823 other professionals, excluding administrators and librarians. There were 2,288 FTE librarians among network members. Library technicians or paraprofessionals, and FTE clerical and support staff numbered 1,479.

Funds Received and Operating Expenditures of Library Networks

Library networks received $656 million in 1985-86, an average of $863,000 per network. Operating expenditures were $490 million in 1985-86, representing an average operating expenditure per network of $642,000.

Federal grants received by the library networks in 1985-1986 were estimated to be $65.1 million, or $85,700 per library network. The dollar amount of these grants came to 9 percent of all funds received. Currently, 36 percent of funds received by networks come from Federal, State or local grants.

Survey Methodology

The survey addressed a candidate universe of 1,050 entities purporting to be library networks. The initial effort was a mail survey addressed to all 1,050. Of these, 570 returned valid responses, 2 returned unusable responses, and 2 refused to respond. This was denominated as Stratum One. The remaining 476 nonrespondents (denominated as Stratum Two) were examined, and a systematic sample of 122 was selected from this group. The 122 selected entities in Stratum Two were surveyed by telephone and 108 provided valid responses; 14 refused. To account for nonresponse, sample weights of 1.007 and 4.407 were used for sample units in Stratum One and Stratum Two, respectively. Applying the 7 criteria for identification of a library network, it was estimated that of the total of 1,050 entities, approximately 760 were actually library networks conforming to the definition.

The sizes of the strata and the sample, along with results of survey response, are given below:

	Stratum One	Stratum Two	Total
Universe	574	476	1,050
Sample	574	122	696
Valid responses	570	108	678
Not usable	2	0	2
Refusals	2	14	16

Accuracy of Estimates

The statistics in this bulletin are estimates derived from a sample. Two broad categories of error occur in such estimates: sampling and nonsampling errors. Sampling errors occur because observations are made only on samples of library networks, not on the entire population. Nonsampling errors occur not only in sample surveys but also in complete censuses or entire populations.

Nonsampling errors can be attributed to a number of sources: inability to obtain a list of the entire library networks population; ambiguities in definitions; differences in interpretation of questions; inability or unwillingness to provide correct information; mistakes in recording or coding data; and other errors of collection, processing, sample coverage, and estimation of missing data.

The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors. In relatively large national surveys sampling errors, while important, generally are not the primary concern. The standard errors presented in the table that follows are typical of those for most estimates presented in this bulletin. All standard error estimates were calculated using the SAS program and do not take into account the finite population correction factor. They are available from the Center for Education Statistics. One can easily determine confidence intervals for any desired level of confidence by multiplying the standard error by the appropriate constant factor. For example, if the estimate is "x" and the standard error is "s," then the 95 percent confidence interval is "x$\pm$ 1.96 times s."

The nonsampling errors are difficult to estimate. One major source of nonsampling error was considered: nonresponse bias. The survey instrument response rate for Stratum Two was 88.5 percent and the item response rate within instruments, for the items used to develop the estimates in this report, were above 95 percent. The weights used to calculate the estimates were constructed in a fashion that compensated for instrument nonresponse.

Illustrative Estimates and Standard Errors of Variables

Variable	Estimates	Standard Error
Qualified library networks	760	19
Total funds received	$656,000,000	$306,000,000*
Average funds received per network	$863,000	$403,000*
Total operating expenditures	$490,000,000	$207,000,000*
Average expenditure per network	$642,000	$272,000*
Training/workshops provided by network headquarters	74% of headquarters	2.1%
Interlibrary loan provided by network members	53% of members	3.1%
Catalog production provided by external sources/contractors	for 29% of networks	2.8%
Training/workshops used by network headquarters	54% of headquarters	2.7%
Consultation services used by network members	71% of members	2.4%
Total of participating organizations in networks	76,280	18,373

*Due to the extreme skewness of the financial data, the standard errors and resulting confidence intervals are large.

For More Information

For further information on topics reported in this bulletin, contact Milton Chorvinsky, U.S. Department of Education, Office of Educational Research and Improvement, Center for Education Statistics 555 New Jersey Avenue NW., Washington, D.C. 20208-1328.

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